THE GREENBACK IN WAR.

THE valuable paper by Professor Henry C. Adams in the September number of the POLITICAL SCIENCE QUARTERLY, on the relative merits of taxes and interest-bearing loans as financial resources in war, suggests a consideration of a third and an extremely plausible and pernicious measure of war finance, the levying of a forced loan under the guise of an issue of government paper, — most plausible and pernicious when it has the quality of legal tender affixed to it. We may disregard the notions of the extreme "greenbackers," although they have not yet ceased to wield some influence in politics; but there remain some facts that we cannot afford to disregard. A large proportion of the people of the United States believe that the issue of paper money in the civil war was a necessity, and that its legal tender quality did help it to circulate and to meet the demands of the government. The Supreme Court of the United States has affirmed the constitutionality of the "greenback" in peace as well as in war, and it has declared Congress to be the sole judge of the necessity that warrants the issue of legal tender notes. The extreme ease of obtaining money by printing it, without directly taxing the present generation or seeming to leave to the next a debt to be paid by taxes, will always make it the first device thought of by a finance minister when a large quantity of money has to be raised at once.

The value of the legal tender quality in a government issue can be very readily disposed of. Money is used to pay debts and to make purchases. Current accounts need not be considered, for they are usually settled every thirty or sixty days, and the fluctuations of the currency while they are running are comparatively small. The legal tender notes were available by law for the settlement of debts. This did the government no good. The government did not need money to pay debts with;

it wanted money to make purchases with. The legal tender notes enabled debtors to settle for less than they borrowed, but the government had no interest in this; and the use of money in paying time loans is so small compared with its use in making current purchases, that the legal tender quality of the notes could not add appreciably to their general utility. In the making of purchases, whether by the government or by an individual, the legal tender quality availed nothing, for the seller of the goods wanted the currency to make other purchases with; buyer and seller simply bartered so many government notes for so much flour. But here we come to a question which is much debated, even among persons whose ideas on finance are in general what are called sound. Prices rose during the war; the greenbacks were depreciated; but was not the advance in prices due mainly to the destruction of material by the war and the enormous purchases by the government? At the same moment that the government confessed bankruptcy by making its notes a legal tender, it depreciated its notes by refusing to receive them at custom houses; did not this create a special demand for gold that enhanced its price?

I have made an effort to answer this question by a comparison of prices as given in the Treasury reports, month by month, with the gold premium during the war. The following is the method employed for ascertaining the course of prices, or the variation of the legal tender note's purchasing power. The following twelve staple articles were selected for study: wheat flour, corn meal, anthracite coal, copper sheathing, American window glass, Buenos Ayres hides, common English bar iron, pig lead, hemlock leather, mess pork, mess beef, and common wool. Such a quantity of each of those articles was taken as cost, January 1, 1860, $8.333. The whole list, then, on the date given, cost $100. For each month following the same quantity of each article was taken and multiplied by the price then quoted, and the twelve results added. At the date given, 1.581 barrels of flour, 4 hundredweight of bar iron, 21.36 pounds of wool, and so on, were taken. This method, it would seem, ought to give a correct idea of the variations of prices, or the

depreciation of the legal tender note, not in gold, but in commodities. The following table gives the fluctuations of prices obtained in this manner, month by month, and the monthly premium on gold, for purposes of comparison. But the prices are taken on the first of each month, while the gold premiums are monthly averages. The table is designed to show the relation of prices on the first of any month with the premium on gold for the average of the preceding month.

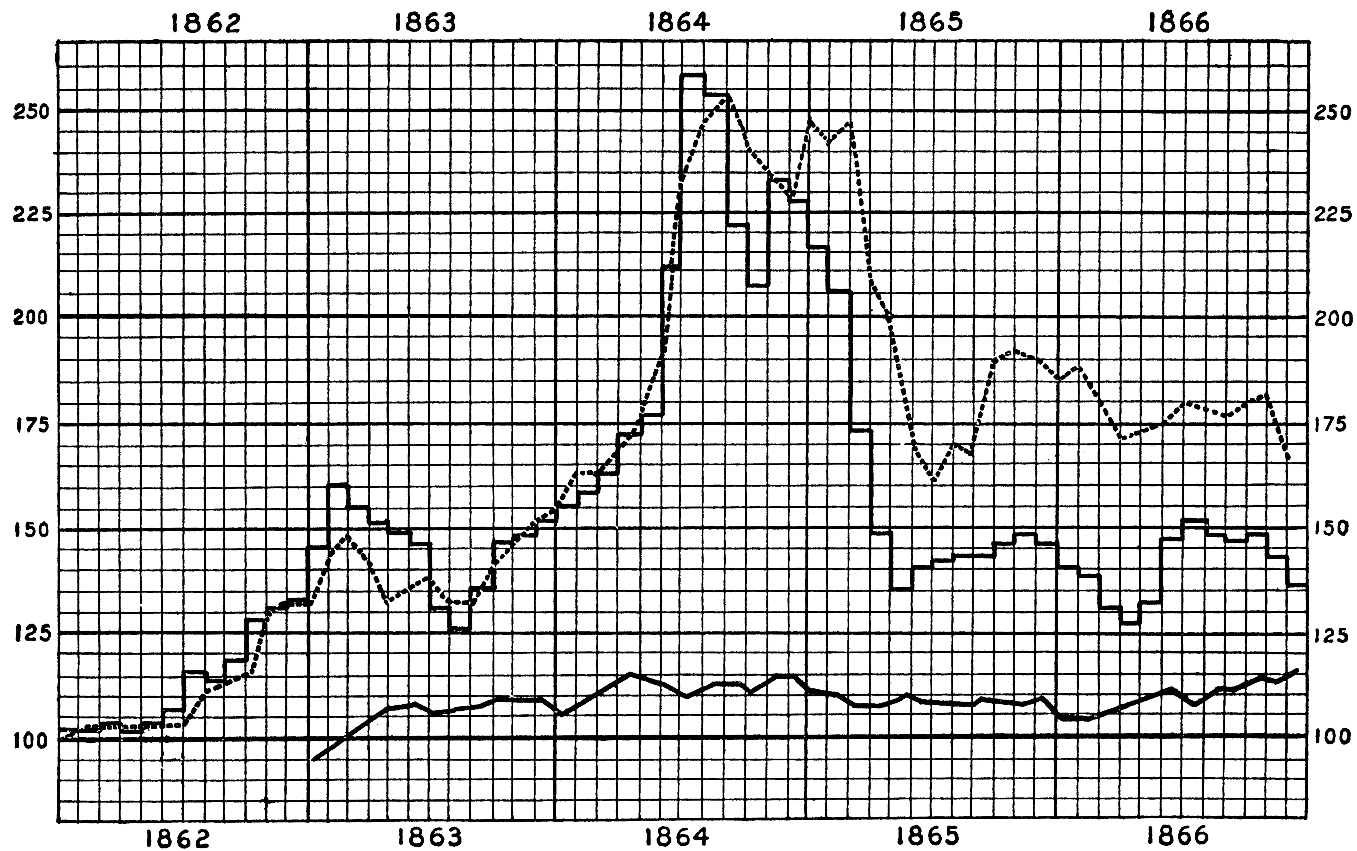
	Gold.	Prices.
Jan., 1862		
Average	$102.50	
Feb. 1		$103.05
Average	103.50	
March 1		102.13
Average	101.80	
April 1		102.90
Average	101.50	
May 1		102.17
Average	103.50	
June 1		103.84
Average	106.50	
July 1		104.80
Average	115.50	
Aug. 1		111.86
Average	114.50	
Sept. 1		114.27
Average	118.50	
Oct. 1		115.93
Average	128.50	
Nov. 1		128.90
Average	131.10	
Dec. 1		132.82
Average	132.30	
Jan. 1, 1863		132.25
Average	145.10	
Feb. 1		143.67
Average	160.50	
March 1		147.11
Average	154.50	
April 1		141.07
Average	151.50	

	Gold.	Prices.
May 1, 1863		$134.10
Average	$148.90	
June 1		135.06
Average	144.50	
July 1		137.77
Average	130.60	
Aug. 1		131.03
Average	125.80	
Sept. 1		131.45
Average	134.20	
Oct. 1		139.30
Average	147.70	
Nov. 1		146.07
Average	148.00	
Dec. 1		151.72
Average	151.10	
Jan. 1, 1864		153.00
Average	155.50	
Feb. 1		162.50
Average	158.60	
March 1		162.47
Average	162.90	
April 1		168.16
Average	172.70	
May 1		176.77
Average	176.30	
June 1		190.32
Average	210.70	
July 1		230.94
Average	258.10	
Aug. 1		246.90
Average	254.10	

	Gold.	Prices.
Sept. 1, 1864		$254.18
Average	$222.50	
Oct. 1		239.40
Average	207.20	
Nov. 1		232.76
Average	233.50	
Dec. 1		230.30
Average	227.50	
Jan. 1, 1865		248.88
Average	216.20	
Feb. 1		242.19
Average	205.50	
March 1		247.02
Average	173.80	
April 1		207.36
Average	148.50	
May 1		199.11
Average	135.60	
June 1		170.52
Average	140.10	
July 1		162.70
Average	142.10	
Aug. 1		169.16
Average	143.50	
Sept. 1		168.83
Average	143.90	
Oct. 1		189.33
Average	145.50	

	Gold.	Prices.
Nov. 1, 1865		$191.13
Average	$147.00	
Dec. 1		190.21
Average	146.20	
Jan. 1, 1866		186.28
Average	140.10	
Feb. 1		188.34
Average	138.40	
March 1		183.86
Average	130.50	
April 1		171.14
Average	127.30	
May 1		173.00
Average	131.80	
June 1		175.24
Average	148.70	
July 1		179.29
Average	151.60	
Aug. 1		177.95
Average	148.70	
Sept. 1		177.02
Average	145.50	
Oct. 1		180.37
Average	148.30	
Nov. 1		181.61
Average	143.80	
Dec. 1		166.84
Average	136.70	

What these figures show in detail, the following diagram shows more graphically. The dotted line which runs from point to point shows the variations of prices as taken on the first day of each month for the years indicated on the margin. The line consisting of horizontals and perpendiculars represents the premium on gold averaged month by month. The lowest line obliquing from point to point represents the quotation of the 6's of 1881, taking the mean quotation for each month. The base or par line, indicated by the figures 100, represents, for this diagram, the legal tender notes, in terms of which the prices of bonds, merchandise, and gold are expressed. The


1862
1863
1864
1865
1866
250
225
200
175
150
125
100
250
225
200
175
150
125
100
1862
1863
1864
1865
1866

facts shown in this diagram may be shown in diagrams taking gold for the base line, and showing the fluctuations of commodities and greenbacks compared with gold, or taking prices for a base line and showing the variations from that line of the lines representing gold and greenbacks. The commodities that cost $100 on January 1, 1860, rose during the year not more than 84 cents, and fell not more than $2.21. In January, 1861, the list stood at $96.24; in June, $94.79; in July, $87.66; in August, $86.32; in September, $87.59; and in December, $97.15.

The first effect of the war, then, was not to raise prices. It may be presumed that the state of alarm and uncertainty incited men to sell rapidly and turn their merchandise into money. This was favorable to the government. The coincidences in the table above are striking enough to amount to something very near a mathematical demonstration. Between January, 1862, and November, 1864, the premium on gold and the premium on merchandise agree within less than a dollar in nine months, within one to five dollars in eleven months, within five to ten dollars in five months, and within ten to twenty dollars in eight months. In the latter part of 1864 there was a decided advance in prices. This is easily accounted for by the destruction of material that had occurred, and the effect of what Professor Adams calls the labor tax — the withdrawal of men from industries to recruit the army. But the general advance of prices having occurred, the depreciation of legal tender notes in gold and their depreciation in commodities vary sympathetically much as before. From November, 1864, to December, 1866, are twenty-five months. In one, the first of the series, before the rise of prices had been completed, the two premiums are within three or four dollars of each other. The difference is between twenty and twenty-five dollars in three months, between twenty-five and thirty dollars in five months, between thirty and forty dollars in four months, and between forty and fifty dollars in twelve months.

The corresponding movements of the two premiums can be seen at once on a diagram, but they can be followed as well in

a table of figures. The table shows complete comparisons between the gold premium, average, for one month, and the merchandise premium for the first day of the following month in fifty-eight cases. In thirty-nine of these cases an advance in the premium on gold is immediately followed by an advance in the premium on merchandise, and conversely in the case of a fall; of the thirty-nine instances, twenty-five are rises and fourteen are falls. In ten of the remaining nineteen instances the premium on merchandise follows the movement of the premium on gold after an interval of a month; a rise in gold from July to August is followed by a rise in prices on the first of October instead of the first of September. Of the nine remaining cases some of the rises of prices when gold fell, or falls of prices when gold rose, are very small fluctuations, and some occurred late in the summer of 1864 when the general range of prices was advancing as measured in gold.

Secretary Fessenden was so carried away with the prevalent delusion about the nature of gold premiums that he remarked in his annual report:

> It is quite apparent that the solution of this problem [the violent fluctuations of gold in 1864] may be found in the unpatriotic and criminal efforts of speculators, and probably of secret enemies, to raise the price of coin, regardless of the injury inflicted upon the credit of the country, or desiring to inflict. All such attempts should be indignantly frowned upon by a patriotic community, and efforts of all good citizens invoked to counteract such nefarious schemes. A law providing for the exemplary punishment of combinations for such a purpose might tend to vindicate, if it could not fully protect, the public rights in this regard; and it should be, so far as possible, rigidly enforced.

It is a sufficient reply to this to point out that, while the highest point reached by gold was 285, bar iron went up on the same scale to 500.

No government has succeeded in fixing prices; and until that can be done, the legal tender quality of government paper is impotent for all purposes, except to enable debtors to cheat their creditors — an operation of no sort of value to the government and a distinct injury to the community. It is not im-

probable that the war might have been carried through on a gold basis without the issue of government notes. Without the greenbacks we could have borrowed money in London; there were times when that would have been convenient to us. If we had had English money, we should have had English sympathy, and there would have been no Alabamas. It is the belief of many that the attitude of England prolonged the war. Her attitude would have been different if we had eschewed legal tenders and borrowed money in Lombard Street.

There was a pretty good stock of gold in this country at the outbreak of the war. The government could have borrowed every dollar of it if it had not driven it out of the country. In the fiscal year 1861, more gold came into this country than went out of it by $16,548,531. According to Treasury estimates, we had $90,000,000 more of coin in the country in 1861 than in 1860. The superintendent of the mint estimated that there was between $275,000,000 and $300,000,000 of coin in the country in 1861, all but $20,000,000 of which was in the loyal states. Although there was an enormous increase in government disbursements, it does not follow that anything like a proportionate increase in the volume of the currency was necessary; for one thousand dollars will pay for a million dollars worth of merchandise if it circulate fast enough. In the latter part of the summer and in the fall of 1861, the associated banks of New York, Philadelphia, and Boston loaned the government $5,000,000 every six days; and these advances could not only have been kept up indefinitely, — for Mr. George S. Coe says that the money flowed back into the banks in a week from the time it was advanced to the government, — but it could have been greatly increased by bringing the banks of other cities into the association, and promptly supplying the banks in return with something they could sell to the people. The banks of the three cities advanced $150,000,000 to the government before they received any negotiable securities from the government. From August to December 7, 1861, the banks of New York advanced $105,000,000, and their gold reserves were depleted only $7,000,000, in spite of this great delay in the delivery of

the 7-30 notes. But in December Secretary Chase began paying out the "old demand" notes. Of course they, instead of gold, flowed into the banks. This was the beginning of the end. In three weeks after December 7 the New York banks lost $13,000,000 of gold, and then they suspended specie payments. Then the era of fiat money set in. There was a deliberate purpose to depreciate the currency in 1862, in order to make bonds sell at apparent par. Congressmen declared that it was not becoming the dignity of a great nation to peddle its bonds in Wall Street for what they would bring in gold. Representative E. G. Spaulding said in the House, in opposition to putting bonds on the market without previously diluting the currency:

> Depreciation would greatly increase the debt by requiring a much larger amount of bonds to be issued than would be needed if your loans were taken at par.... I fear the 20-year 6 per cent bonds would under the pressure fall to 75, 70, 60, and even 50 cents. This would be a ruinous mode of raising the means to carry on the war.

But if Mr. Spaulding did not believe that the government's promises to pay would be taken at par when they carried with them 6 per cent interest in gold, why did he suppose that promises to pay at no fixed time and carrying no interest would circulate at par? Simply because he was a victim of the legal tender, or fiat money, delusion. The very 6 per cent bonds that Mr. Spaulding was talking about were issued at less than 65, measured in gold; and in July, 1864, they had fallen to 40. In that year depreciation was repeated in order to make 5 per cent 10-40 bonds sell at apparent par.

To the government this involved enormous loss. It cannot be calculated, but some facts will suggest its immensity. The government issued, of the 5-20's of 1862, $514,771,600, which, reduced to gold by the average annual premiums in the years of issue, yielded $293,323,711. Here is a shrinkage of no less than $221,447,889. The entire amount of this loan was redeemed at or very close to par in gold. The government borrowed in real value $293,323,711; it paid 6 per cent on the

nominal amount borrowed, or over 10 per cent on the actual amount borrowed; then it paid back in real value 75 per cent more than it borrowed; and this bonus was paid in an average period of eleven years from the time of borrowing, nearly 7 per cent a year, making in all about 17 per cent per annum that the government paid on what purported to be a 6 per cent bond. Reducing the issues and redemptions of the consols of 1867 to gold in the same way, we find that the government borrowed $277,494,660, and paid, to 1880, besides 6 per cent interest on the face (not the selling) value of the bonds, $377,287,850. The government paid 8 per cent on the amount really borrowed, and after ten years paid a bonus of 36 per cent, equal to 3.6 per cent a year, making over 11 per cent that the government paid for money when the war was over, the nation's solvency established, and the country prosperous. That this was due to the injury inflicted on the government's credit by the legal tenders is obvious from the fact that, though the bonds drew interest in gold, and were presumably, when not so specified, to be paid in coin, their prices kept comparatively close to the legal tenders, instead of rising with gold. In 1863, 1864, and 1865, the 6's of 1881 never rose above 115½ in legal tenders, and were usually below 110. The 10-40's in 1864, 1865, and 1866 ranged from 89¼ to 103½ in currency.

If the legal tender act was ruinous to the national Treasury, it was robbery to individuals. Anything like the extent of this robbery it is impossible to show, but some figures are suggestive. In 1862 the deposits in savings banks in New England and New York were reported at $168,527,817. This is substantially the gold value of the deposits, as the statements were made before depreciation had begun, or had gone far. The savings bank reports warrant the assumption that this amount of money was drawn out in two years. If we reduce half the amount to a gold value in 1863, and half to a gold value in 1864, the loss to depositors by depositing gold or redeemable notes and drawing out legal tender notes was over $26,000,000 in 1863, and nearly $43,000,000 in 1864, or about $69,000,000 in all. The legal tenders were what these banks had to accept

from the people who had borrowed money of them, so that this $69,000,000 is money that by act of Congress, and without any benefit to the government, directly or indirectly, was taken from the small capitalists who deposited their savings in the banks, and given to the larger capitalists who borrowed money of the banks.

For the year ending November 1, 1863, twenty-five life insurance companies paid death policies amounting to $2,369,139. During this period the average premium on gold was 42.2. The depreciation on these death payments, or the extent to which an act of Congress robbed the widow and the fatherless for no public purpose, was $703,078. In the year ending November 1, 1864, twenty-five companies paid death losses amounting to $3,281,470. For the twelve months gold stood at about 190. The depreciation on these losses was $1,554,470; or, for two years, $2,257,548.

The variations of prices, gold premiums, and bond quotations during the period of the war, justify the following conclusions:

I. The general impression that war sends prices up is a mistake. In 1861, 1862, nearly all of 1863, and half of 1864, prices were lower, measured in gold, than they were in 1860. It was not till within nine months of the surrender at Appomattox that a general and lasting advance in prices measured in gold occurred.

II. The premium on gold was substantially the measure of the decreased purchasing power of government notes, and not a merely speculative price put on gold. This is shown by the fact that while the variations of prices as compared with legal tender notes were extremely irregular, and bore no perceptible relation to the latter, prices and gold premiums rose and fell in close accord with each other for five years; and, what is more, the changes in gold premiums closely preceded like changes in prices.

III. The issue of government paper forced the banks to suspend specie payments. The amount of coin in the country, and the rapidity with which it was advanced to the government by the banks of only three cities, render it probable that any

large issue of government paper might have been avoided, and the war carried through on a gold basis. While the amount of government paper out was small there was little or no premium on gold or advance in nominal prices, although specie payments had been suspended.

IV. But the government paper being issued, it follows from No. II that the legal tender quality given it added in no appreciable degree to its value. The notes bought more or less of flour or cloth from time to time, according to the prospect at that time that the government would ultimately redeem its promise to pay dollars with dollars.

V. The legal tender device enabled private debtors to wrong their creditors, but it did not enable the government to sell its bonds at par in the gold with which it promised to redeem them or in the commodities which it had to buy. The legal tender act was so violent and injurious a measure that it hurt the credit of the government. This is shown by the fact that gold bonds kept close to par in greenbacks instead of par in gold.

VI. The expulsion of gold and the transaction of business on the basis of a depreciated and fluctuating currency cost the government an amount several times greater than the volume of legal tender notes outstanding at any one time. The government sold its bonds at par in notes that were depreciated partly by its own act in refusing to accept them at custom houses; with this money it bought merchandise that had advanced greatly as expressed in government notes, though for much of the period actually reduced in gold; and finally it paid off the bonds at a premium, or with notes that were worth par in gold, or close to it; so that the legal tender act vastly increased the amount of bonds that had to be sold and the actual compensation the government paid to its creditors for their advances.

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